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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,668	02/26/2002	Scott R. Gremmert	H0002146	8676

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EXAMINER

AMSBURY, WAYNE P

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/085,668

Applicant(s)

GREMMERT ET AL.

Examiner

Wayne Amsbury

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

CLAIMS 1-26 ARE PENDING

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Applicant's arguments filed 10/12/04 have been fully considered but they are not persuasive.

Applicant fails to recognize the role of elevation for situation awareness in the applications of Delorme to aviation. In the interest of compact prosecution, additional evidence of this role is provided in the rejections below.

3. Claims 1-6, 8-11, 13, 17-21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLorme et al (Delorme), US 5,559,707, 24 September 1996, in view of either of: Tran, US 5,883,586, 16 March 1999 or Sigeti et al (Sigeti), US 6,208,997, 27 March 2001.

Delorme is directed to a computer aided routing system that determines and provides routing information for users [COL 2 lines 20-26], and teaches the use of embodiments that are explicitly addressed to terrain [COL 43 lines 29-54].

As to **claim 1**, Delorme provides terrain data to multiple users who are multiple requesters [FIG 2; COL 9 lines 15-46].

Delorme teaches that users select an area of interest [COL 3 line 61 and after], and explicitly notes that data is extracted from a database [COL 31 lines 32-50; COL 35 lines 12-29; COL 47 line 50 and after]. The extracted data is sent to the requester [FIG 1x-2 and discussion]. Delorme provides for extensive formatting of the requested data throughout [COL 2 lines 19-32 and elsewhere].

Delorme does not explicitly address terrain elevation, but the discussion of COL 44 lines 28-54 makes clear that situation awareness in aviation is involved in a significant alternate embodiment. Tran provides explicit evidence of the role of terrain elevation information in situation awareness at COL 4 lines 15-32 and elsewhere. Sigeti provides similar evidence at COL 8 lines 24-46 and elsewhere. **It would have been obvious** to one of ordinary skill in the art at the time of the invention to include elevation information in terrain data in Delorme because Delorme is intended to be applied to aviation embodiments and because of the importance of the role of terrain elevation in aviation.

As to **claim 2**, map scaling is taught repeatedly by Delorme, such as at COL 28 lines 29-46].

As to **claim 3**, the user in Delorme is given a wide range of options [FIG 2; COL 26 lines 49-63] and in particular may choose orientations [COL 14 lines 12-27 and elsewhere].

As to **claim 4**, the entire discussion of FIGS 1B-1P [COL 12 line 27 and after] is directed to choosing location and size and resolution and type of terrain data required.

As to **claim 5**, there are processes occurring at several levels, all ultimately controlled at some level by the user.

From the dependency of claim 5 on claim 1 it is clear that the intent of further limitation is control by the user, as opposed to other forms of industrial process control. All of the options noted above in Delorme are directed to user control of the process, which is an iterative process [COL 2 line 59 and after; COL 15 line 64 and after].

As to **claim 6**, the options of the user, as noted above, are used to address routing and priorities. The user imposes integrity on the results within the iterative process. In particular, note the use of multiple databases [COL 16 lines 37-55 and after].

The elements of **claims 8-11, 13, 17-21 and 26** are rejected in the analysis above and these claims are rejected on that basis.

4. Claims 7, 12, 14-16 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLorme et al (Delorme), US 5,559,707, 24 September 1996 in light of Lamburt et al (Lamburt), US 6,374,241, 16 April 2002, in further view of either of: Tran, US 5,883,586, 16 March 1999 or Sigeti et al (Sigeti), US 6,208,997, 27 March 2001.

Official Notice is taken that it was well known at the time of the invention to use multiple servers for performing online data queries in an efficient manner and in particular for streaming of multimedia data for the purposes of reliability or integrity or redundancy and.

In the interest of compact prosecution, Lamburt is provided as evidence of the Official Notice above. Lamburt is addressed to facilitating efficient data transfer of multimedia data (such as terrain data) [0003] in order to enhance the performance and reliability of data transmission to a user [0044]-[0046].

As to claims 7 and 12, Delorme teaches the use of multiple databases, but does not explicitly place them on separate servers, which is the further limitation of this claim. Lambert provides evidence that it was well known at the time of the invention to service online queries from separate server nodes, each fully redundant and capable of processing a request [ABSTRACT and elsewhere].

It would have been obvious to one of ordinary skill in the art at the time of the invention to service queries on separate servers because redundancy provides for comparison of sources and the correction of errors, thus promoting data integrity.

As to claims 14-15, Lamburt teaches the use of queues in general for managing cached data objects [COL 27 lines 57-60], and for managing requests in particular [FIG 23; COL 11 lines 7-12; COL 11 lines 41-45; COL 16 lines 32-50]. The functions of adding and removing (de-queuing) are inherent in the data structure of a queue.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to remove aborted requests because otherwise they would be improperly processed when they reach the front of the queue.

As to claim 16, the use of a queue determines that orders are processed by in the order received.

The elements of **claims 22-24** are rejected in the analysis above and these claims are rejected on that basis.

As to **claim 25**, Lamburt explicitly teaches the use of parallel processing [COL 57 lines 37-45; COL 58 lines 14-28].

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 571-272-4015. The examiner can normally be reached on M-F 6-18:30 FIRST WEEK.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPA


WAYNE AMSBURY
PRIMARY PATENT EXAMINER